



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,265	07/14/2005	Lennart Gustavsson	128.1174USN	5108
33369	7590	12/07/2006		
FASTH LAW OFFICES (ROLF FASTH) 26 PINECREST PLAZA, SUITE 2 SOUTHERN PINES, NC 28387-4301			EXAMINER CORDRAY, DENNIS R	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/542,265

Applicant(s)

GUSTAVSSON ET AL.

Examiner

Dennis Cordray

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1,4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The terminal disclaimer filed on 10/12/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 7077931 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Figure 1: mixers M1, M2 as described on p 3, line 28 and p 4, line 1.
- Figure 2: return lines L₅ and L₆ as described on p 6, lines 24-25.
- Figure 2: pump device P24 as described on p 10, line 22.
- Figure 3: further main conduit 1' as described on p 8, line 8.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- Figures 1 and 2: ST, presumed to be the storage tower described on p 3, line 17.
- Figures 2-4: P1 to P10, presumed to be pumps.

4. The drawings are objected to because of the following minor informalities.

Art Unit: 1731

- In Figure 2, pump P23' is mislabeled as 23'.
- In Figure 2, the label "L4" should be changed to "L₄" to be consistent with the other line designations.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:
 - On p 6, line 8, the term "L2" should be changed to "L₂".
 - On p 7, line 30, the term "L0" should be changed to "L₀".

Art Unit: 1731

- On p 7, lines 28 and 30, the term "FT2" should be changed to "FT₂".
- On p 7, lines 36 and 37, the terms "FT3" and "FT4" should be changed to "FT₃" and "FT₄".

Appropriate correction is required.

Claim Objections

6. Claim 1 is objected to because of the following informalities:

Claim 1 recites on p 4, line 13 the term "counter-Previously", which makes no sense. The Examiner believes that the term should be "counter-currently" as recited in the previously amended claims. The claim will be examined as if the term read "counter-currently".

Appropriate correction is required.

7. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 4 recites the pressure limitation of 4.5 – 6.5 bars. Claim 4 depends from Claim 2, which recites a pressure limitation of 1.5 – 3.5 bars, thus Claim 4 recites a pressure range outside of the bounds of its parent claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites, in the last line on p 4, "in the flow direction" but fails to recite whether the "flow direction" refers to the flow direction of the pulp or the flow direction of the wash liquor.

9. Claim 5 recites that "the main conduit is connected to receive and distribute acidic filtrate from and to, respectively, acidic bleaching steps." The claim is indefinite because it does not specify if 1) acidic filtrate is received from one acidic bleaching step and distributed to the same acidic bleaching step, for instance as in a recycle loop, 2) acidic filtrate is received from one acidic bleaching step and distributed to a preceding acidic bleaching step, 3) acidic filtrate is received from one acidic bleaching step and distributed to a subsequent acidic bleaching step, 4) acidic filtrate is received from one acidic bleaching step and distributed to multiple acidic bleaching steps, 5) acidic filtrate is received from multiple acidic bleaching steps and distributed to one or more acidic bleaching steps, being the same or different acidic bleaching steps, or 6) some other combination of receiving and distributing.

10. Claim 6 recites that “the main conduit is connected to receive and distribute alkaline filtrate from and to, respectively, alkaline bleaching steps.” The claim is indefinite because it does not specify if 1) alkaline filtrate is received from one alkaline bleaching step and distributed to the same alkaline bleaching step, for instance as in a recycle loop, 2) alkaline filtrate is received from one alkaline bleaching step and distributed to a preceding alkaline bleaching step, 3) alkaline filtrate is received from one alkaline bleaching step and distributed to a subsequent alkaline bleaching step, 4) alkaline filtrate is received from one alkaline bleaching step and distributed to multiple alkaline bleaching steps, 5) alkaline filtrate is received from multiple alkaline bleaching steps and distributed to one or more alkaline bleaching steps, being the same or different alkaline bleaching steps, or 6) some other combination of receiving and distributing.

11. Claim 8, which ultimately depends from Claim 1, recites that “before the second and fourth branch positions, filtrate is led to the main conduit via pump devices.” Claim 1 recites that the filtrate from the subsequent wash of the second bleaching step is led to a second branch position in the main conduit, and filtrate from the subsequent wash of the first bleaching step is led to a fourth branch position (A4) in the main conduit. Claim 8 is indefinite because it does not provide an indication of whether “before the second and fourth branch positions” is intended to mean before the branch positions in the flow direction of the wash liquor, or before the branch positions in the flow direction

Art Unit: 1731

of the pulp. Since there is no indication in the Specification or Drawings of filtrate being led to the main conduit via pump before the second and fourth branch positions in the flow direction of the wash liquor, it is assumed by the Examiner that the intended location is before the branch positions in the flow direction of the pulp, as in filtrate from the D₀ bleaching step. Claim 8 is also indefinite because it does not specify whether 1) filtrate is led to the main conduit via pump before both of the second and fourth branch positions or 2) filtrate is led to the main conduit via pump before each of the second and fourth branch positions.

12. Claim 14 recites "an other end of the main conduit". It is not clear which end of the main conduit is considered to be the "other end".

13. The remaining claims depend from and thus inherit the indefiniteness of Claim 1.

Allowable Subject Matter

14. Claims 1-15 would be allowable if rewritten or amended to overcome the objections and the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: The nearest prior art, Rapson (3698995), discloses a bleaching process wherein at least part of the wash water from washing bleached cellulose pulp or bleached and extracted cellulose pulp is employed to wash the unbleached pulp or to wash the pulp

Art Unit: 1731

from bleaching or extraction stages, thereby establishing a counter-current flow of wash water (Abs; col 1, lines 19-27; col 2, lines 20-60; col 3, lines 40-54 and 64-75; col 4, lines 17-25; Figure 1). Rapson fails to teach or make obvious a pressurized main conduit having branches therefrom which supply wash liquor to the wash units and other branches that receive the filtrate from the wash units back into the same main conduit.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1, 2, 4, 7-8, and 14-15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6-9, 12, and 14 of copending Application No. 101541,435. Although the conflicting claims

Art Unit: 1731

are not identical, they are not patentably distinct from each other because the claims of application '435 encompass or overlap the instant rejected claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 27 and 29-31 of copending Application No. 11/280,915 in view of Yin et al (US 6,569,284). Application '915 discloses all the steps of instant claim 1 except that the bleaching line comprises two bleaching steps, that the main conduit is pressurized, and the relative position of the fourth branch. However, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to position the fourth branch conduit in whatever location on the main conduit would result in the simplest arrangement, which would clearly have resulted in the fourth branch conduit being located subsequent to the first through third branch conduits. Yin discloses a method of bleaching cellulose pulp in a bleaching line, having at least two bleaching steps (Abstract), with a wash apparatus arranged after each bleaching step (Fig. 1, items 16, 24, 60, and 72), and discloses pumping filtrate from washers (col. 6, lines 6-9 and Fig. 1, item 74) to a main conduit which supplies wash liquor to wash apparatuses subsequent to other bleaching steps (Fig. 1, items 64, 60, 48, and 24). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a filtrate pump as described by Yin in the pulp bleaching method of application '915 to obtain the invention as specified in

Art Unit: 1731

claim 1. It would further have been obvious that each filtrate pump used would contribute pressure to the main conduit, resulting in a pressurized conduit.

The motivation would have been to collect and transfer the wash liquid from a washer (col. 5, lines 16-21). This is a provisional obviousness-type double patenting rejection.

17. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 27-34 of copending Application No. 11/287,065 in view of Yin et al, as applied in the provisional obviousness-type double patenting rejection of claim 1, above. Application '065 discloses all the steps of instant claim 1 except that the bleaching line comprises two bleaching steps, that the main conduit is pressurized, the presence of a third branch, and the relative position of the third and fourth branches. However, at the time of the invention, it would have been obvious to a person of ordinary skill in the art that a third branch would be required to convey the second portion of wash water to the second apparatus, as disclosed in claim 33 of application '065, and to position the third and fourth branch conduits in whatever locations on the main conduit would result in the simplest arrangement, which would clearly have resulted in the third and fourth branch conduits being located subsequent to the first and second branch conduits. Yin is applied as in the provisional obviousness-type double patenting rejection of claim 1, above.

This is a provisional obviousness-type double patenting rejection.

Art Unit: 1731

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DRC

DRC

Eric Hug
ERIC HUG
PRIMARY EXAMINER